Law Enforcement’s Identification and Referral of Medically Impaired Older Drivers

D. R. “Ike” Iketani
Project Consultant
Assistant Chief (Retired), California Highway Patrol

NHTSA Priority

NHTSA’s Older Driver Program 5 Year Strategic Plan 2012-2017:

Addresses the “need for law enforcement to have more training and information to help them better assess warning signs and understand what next steps to take and what actions are mandated by laws within their jurisdiction.”

Presentation Outline

• Impact of Aging & Medical Conditions on Driving
  Linda Hill, MD, MPH, Program Director
• Older Driver Traffic Stops & Referral for Evaluation
• Resources to Assist Older Drivers

Interdisciplinary Approach

Washington Statistics

936,000 residents over age 65 - 14% of population

• 530,565 licensed drivers are >65
• 36,681 licensed drivers are >85

By 2040, Washington’s over-65 population is projected to increase to 1,861,000 - 21% of population

http://worldpopulationreview.com
http://www.fhwa.dot.gov
Law Enforcement's Identification and Referral of Medically Impaired Older Drivers

Impact of Aging & Medical Conditions on Driving
Presented by: Dr. Linda Hill

Where Older Adults Reside
- 90% live in suburban and rural areas
- 6 out of 10 older people “age in place”

Importance of Driving

- Mobility
- Freedom
- Independence
- Self reliance
- Self expression

Modes of Transportation

From: Diane Wigle, U.S. Department of Transportation, Lifesavers Conference presentation, 2004; Data source: 2001 National Household Travel Survey

Our Aging Population

Source: U.S. Census Bureau

Health & Aging Concerns

On average, older adults are dependent on alternative transportation after driving retirement:
- Men for 7 years
- Women for 10 years

Problems related to age can include:
- Reduced vision
- Cognitive impairment
- Decreased strength and mobility
- Other medical conditions and medications can impair driving

Our Aging Population

Source: U.S. Census Bureau

“Baby Boomers” (Born 1946-1965)
Vision Changes with Aging

Reduction in Visual Acuity

- Only 1.5% of people between 65 and 69 years of age are visually impaired

- 24% of those over 80 years of age are visually impaired after their best correction attempt

Visual Acuity Impairment

Clarity or clearness of vision; measurement of vision

20/200 Acuity

Reduction in Peripheral Vision

Reduction in Visual Fields can result in:

- Failure to react to a hazard coming from the driver’s far left or far right

- Failure to heed to a stop light suspended over an intersection

- Weaving while negotiating a curve

- Driving too close to parked cars

Reduction in Visual Fields

Reduced ability to see objects to the side when the eyes are focused forward

Hemi Field Defect

20 Degree Field

Cataracts

Cloudy eye lens, very hard time with light and especially difficult coupled with contrast sensitivity

Contrast Sensitivity

Measure of an individual's ability to distinguish between the object and its background
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Macular Degeneration
Deterioration of the central portion of the retina

Glaucoma
Build up of pressure that damages the fibers of the optic nerve: blurred vision, gradual loss of peripheral vision

Diabetes and Vision
Diabetes affects blood vessels in the retina
- Leading cause of blindness in adults age 20 to 74
- Predisposes individual to glaucoma and cataracts

Vision Red Flags
Observe for Difficulty:
- Reading nearby signs
- Identifying number of fingers

Decreased Motor Function
Aging can affect motor function due to:
- Reduced muscle mass
- Increased bone fragility
- Diseases, such as arthritis
Decreased range of motion and frailty can impact the operation of a vehicle, such as changing lanes or making left turns
Passengers with older drivers also tend to be older adults, frail, and at increased risk of fatality
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Fragility Data


Fragility Red Flags

Observe Balance and Fine Motor Skills:

− Weakness or lack of coordination when performing simple tasks
− Excessive shaking or tremor
− Difficulty getting in and out of vehicle
− Difficulty walking or standing

DUID

Cognitive Impairment

Many conditions resulting in cognitive impairment are age-related and are under-diagnosed

Prevalence rates rise significantly with age:

• 65 - 74 years: 2.4%
• 75 - 84 years: 11%
• Greater than 85 years: 34.5 - 50%

Other studies report:

• 29-76% of dementia patients go undiagnosed by primary care physicians
• 65% of dementia cases were not documented in outpatient medical records

From: Lindsay, Can J, Psychia, 2004. 49: 83-91

True/False?

True or False:
Most older persons suffer from some dementia or become senile due to the aging process.

False: Only about 10% of those over age 65 are affected by dementia, but up to half of 85 year olds have dementia.

Dementia

• Dementia is a general term for loss of cognitive function
• Multiple causes:
  − Progressive degeneration such as Alzheimer’s (the most common cause)
  − Brain tumor
  − Stroke (large or ‘mini’ strokes)
  − Lack of oxygen to the brain such as near drowning or overdose

From: 10/10/2013
Dementia Signs & Symptoms

- Confusion, diminished memory, concentration and orientation
- Personality changes and loss of verbal abilities
- Difficulty planning ahead
- Recent memories are often lost and distant memories are retained (those suffering from dementia may give you an address that they lived at many years ago)

Mild Dementia

- Forgetfulness, especially details of recent events
- Subtle disorientation
- Seems normal to those other than family
- May get lost in unfamiliar surroundings
- Ability to safely operate a motor vehicle may or may not be impaired

Moderate/Severe Dementia

- Significant forgetfulness:
  - Difficulty stating address and phone number
  - Unable to retain new information (e.g. appointments)
- Communication: word finding is difficult and may appear confused when questioned
- Acute disorientation (e.g. not knowing where they are)
- Incapable of operating a motor vehicle safely

Clock Drawing

Clock Examples
Driving with Dementia

Many behaviors associated with dementia increase a person’s chance of interacting with law enforcement:

- Forget where they parked their car and report it stolen
- Get lost while driving
- Have a car crash and leave the scene
- Abandon their vehicle and wander away
- Unsafe driving

Source: Alzheimer’s Association

Dementia Red Flags

Observe Driver for:

- Inappropriate response to overhead lights/siren
- Poor personal hygiene; disheveled or inappropriate clothing for existing weather conditions
- Difficulty finding documents
- Difficulty communicating; stumble over words, ramble in short, unattached, meaningless sentences

Other Conditions & Driving

- Parkinson’s Disease
  - Weaving; risky choices
  - Delayed starts, stops and head turns
- Epilepsy (seizure)
- Respiratory and Cardiovascular Disease
  - Restricted blood flow to the brain

Other Conditions & Driving

- Stroke
  - Difficulty with gas and brakes
  - Errors with turn signals and in intersections
- Metabolic Conditions (Diabetes)
  - Hyperglycemia
  - Hypoglycemia

True/False

In diabetics, both hyperglycemia (high blood sugar) and hypoglycemia (low blood sugar) cause the sweet smell of high ketones?

False: Hyperglycemia only
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Hypoglycemia
- Shaking
- Sweating
- Restlessness
- Fast heart beat
- Impaired vision
- Weakness
- Fatigue
- Headache
- Unstable

Hyperglycemia
- Frequent urination
- Dry skin
- Hunger
- Nausea

Potential Effects of Medication
- Slower reaction time
- Visual changes including difficulty tracking, depth perception, peripheral vision
- Decreased coordination (brake/gas)
- Lack of attention
- Confusion/Disorientation
- Drowsiness
- Decreased ability to perceive hazards and identify risks

Step One: Rule Out DUI vs. Medical Conditions

Step Two: Nine Questions

RULE OUT
- Intoxication from alcohol, prescription medication, illicit drugs, or other impairing substances
- Urgent medical conditions

Ask ALL 9 Questions: Subtract one point for each incorrect response.
1. What is your date of birth? (Date)
   Yes: (1 pt)
   No: (0 pt)
2. What is your full legal address? (Address)
   Yes: (1 pt)
   No: (0 pt)
3. What state are you in now? (State)
   Yes: (1 pt)
   No: (0 pt)
4. What city/town are you in now? (City/Town)
   Yes: (1 pt)
   No: (0 pt)
5. Without looking at your watch, can you estimate what time it is now? (Watch)
   Yes: (1 pt)
   No: (0 pt)
6. What day of the week is it? (Day of the Week)
   Yes: (1 pt)
   No: (0 pt)
7. What is today’s date? (Date)
   Yes: (1 pt)
   No: (0 pt)
8. What is the time? (Time)
   Yes: (1 pt)
   No: (0 pt)
9. What is the time zone? (Time Zone)
   Yes: (1 pt)
   No: (0 pt)
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Step Three: Scoring Criteria

<table>
<thead>
<tr>
<th>SCORING CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 or more incorrect</td>
</tr>
<tr>
<td>• Priority re-exam</td>
</tr>
<tr>
<td>• Unsafe to drive; refer to department procedures for alternative transportation and vehicle removal</td>
</tr>
<tr>
<td>3-4 incorrect</td>
</tr>
<tr>
<td>• Regular or Priority re-exam</td>
</tr>
<tr>
<td>• Potentially unsafe to drive; consider totality of circumstances</td>
</tr>
<tr>
<td>0-2 incorrect</td>
</tr>
<tr>
<td>• No Referral or Regular re-exam based on totality of circumstances</td>
</tr>
</tbody>
</table>

Additional Questions

Additional Questions to Assist in Evaluation

• Where are you coming from and where are you going? ¿De dónde vienes y a dónde va?
• Will you please spell your name? Por favor, déjame ver tu nombre.
• Do you have an emergency contact? What is the name and phone number? ¿Tiene un contacto de emergencia? ¿Cuál es su nombre y número de teléfono?

Older Driver Traffic Stops & Referral for Evaluation

California Re-exam Options

• Priority Re-exam
  – Evidence of physical or mental incapacity
  – Violation must be observed or confirmed during investigation of a collision

• Regular Re-exam
  – Not immediate traffic safety threat
  – Observed or Not; reported, second or third hand physical incapacitation, confusion or disorientation

Law Enforcement Role

• Conduct/document traffic stops
• Source for helpful aging driver information
• Identify and refer at-risk drivers to licensing agencies

Common Driving Errors

• Inadequate scanning of roadways
• Difficulty staying in same lane
• Difficulty making left turns and selecting correct lane when turning
• Inappropriate or delayed stopping
• Lane changes without signaling
• Pedal misapplication
• Failure to yield or respond appropriately to road signs or signals

10/10/2013
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Older Drivers in the News

- 90-year-old strikes a mother and two small children in a Fullerton crosswalk; all four badly injured
- Six people injured after an elderly woman crashes into a La Mirada restaurant
- CHP officers spend 40 minutes pursuing an 87-year-old motorist who did not notice the six squad cars and police helicopter following him
- 92-year-old man suspected in fatal hit-and-run...he thought an owl had struck his windshield
- 88-year-old motorist mistakes accelerator for the brake, striking several sidewalk diners and drives into a Redondo Beach restaurant

Vehicle Observation

Visual inspection of the vehicle, both interior and exterior
- Look for scrapes and scratches
- Notes/reminders to the driver
- Adaptive equipment added to the vehicle

True/False?

Law enforcement often shows leniency towards older drivers.

True:
Officers often fail to take appropriate action or document encounters with older drivers.
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Discussion

What are some reasons that officers are more lenient with older drivers?

Common Rationalizations

- “She reminds me of my grandmother/mother.”
- “How can they afford a ticket?”
- “No one got hurt anyway.”
- “He was a little confused, he was only going to the grocery store; everyone has a bad day.”
- “How long will I be tied up here if I try to assess and resolve this situation.”
- “I’ve been taught to respect my elders.”

Meet Dena Kline

Residence: Wilsonville, OR

80 years old
5 Feet Tall and 80 Pounds
Chemotherapy for Bone Cancer
Taking Asthma and Pain Medications

Dena’s Timeline Continued

February 25, 2007
Clackamas Sheriff begins searching for Dena using aircraft, off-road vehicles, marine patrol and detectives

February 26, 2007
Sheriff uses “mass telephone” calling system asking to “Be On the Lookout (BOL)”

February 27, 2007
Sheriff’s Marine Patrol uses sonar near boat ramps along Willamette River

Four Months Later

June 23, 2007
Marine Patrol locates a car submerged in 20 feet of water and confirm that it is occupied by deceased person, Dena Kline
Discussion

Other than law enforcement, who could have intervened?

Importance of Re-exam Referrals

- Documentation; tracking this history determines developing patterns of unsafe driving
- Important to:
  - Law enforcement
  - DOL
  - Driver’s family: contact with law enforcement is often a call to action for family intervention
  - Physician and others working to keep the individual safe

Who Can Report in WA

- Law Enforcement Officer
- Medical Professional
- Concerned Citizen

Reasons for Evaluation

In the interest of public safety, officers are encouraged to report drivers for reexamination in these situations:

- **Medical Condition**
  - Loss of consciousness or control
  - Heart condition, seizure, psychiatric
- **Vision Condition**
- **Poor Driving Skills**

Cooper Jones Act

RCW 46.52.070

Mandatory Reporting and Re-examination

- **Fatality**, and
- Reasonable grounds to believe the operator caused the collision; or
- **Serious injury**, and
- Reasonable grounds to believe the operator caused the collision, and
- Officer gives reasons for that belief
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Serious injury or fatality

Video: Recognizing Cognitive Impairment in Drivers

Discussion

How many of you would complete a Driver Evaluation Request for Mr. Jones?

Mr. Jones’ Errors

Mr. Jones’ Results

California Re-exam Form
Law Enforcement's Identification and Referral of Medically Impaired Older Drivers

Observations

- Pulling out in front of another vehicle when unsafe
- Straddling lane lines and crossing double yellow line
- Slow to yield and respond to lights; stopping abruptly in traffic lane
- Not driving in direction of destination; daughter confirmed father has been lost previously
- Forgetful during conversation
- Unable to correctly state the date, year, day of the week, city, current time and current address

Mr. Jones pulled out in front of another vehicle when unsafe and was slow to yield and respond to lights; stopping abruptly in traffic lane. He was forgetful during the conversation, and unable to correctly state the date, year, day of the week, city, current time and current address. He appeared agitated during questioning.

DOL Review and Testing

- Department of Licensing
- Review of document & decision options
- No action
- Request medical or vision certificate
- Schedule reexamination
- Impose medical probation or safety restrictions
- Suspend
- May involve a vision, written and driving test – evaluated on a case-by-case basis

DOL Considerations

What is the driver’s:

- Current driving knowledge and skills
- Medical and Visual Conditions
- Understanding of their condition, restrictions, and overall compliance with treatment
- Primary driving environment (rural/urban & time of day)
- Desired scope of driving

Potential Outcomes

- No action taken
- Restriction
  - Equipment
  - Time and Location
- Suspension
- Monitoring

Case Example 1: Re-exam?

- Driver is stopped for swerving and officer observes a severe tremor
- Driver states he has Parkinson’s Disease and is currently under a doctor’s care
- Driver admits to using marijuana as part of his treatment plan
- Officer determines driver is not under the influence of marijuana
# Law Enforcement's Identification and Referral of Medically Impaired Older Drivers

<table>
<thead>
<tr>
<th>TREDs</th>
<th>Recommendation</th>
<th>TREDs</th>
<th>Case Example 2: Re-exam?</th>
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</thead>
</table>
| ![TREDs Logo] | **Re-exam** | ![TREDs Logo] | - Driver observed comparing short bursts of speed with another vehicle  
- Driver accelerates rapidly, breaking traction for over ten seconds while pulling away  
- Driver states he did not know it was against the law to intentionally break traction on the roadway while driving a motor vehicle |

| Rationale: | The swerving, tremor, and degenerative disease support a re-exam. |

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<th>Case Example 3: Re-exam?</th>
</tr>
</thead>
</table>
| ![TREDs Logo] | **Re-exam** | ![TREDs Logo] | - Officer called to public parking facility posted for VC enforcement and informed of hit-and-run collision  
- Observes paint transfer and obtains license plate number of car that left the scene  
- Visits residence that corresponds to plate number the following day  
- Individual admits to driving car at the lot, but does not recall collision and tells the officer he's going to call President Clinton because the officer is violating his civil rights |

| Rationale: | This driver showed a lack of knowledge of the rules and regulations governing the safe operation of a motor vehicle. |

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<table>
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<tr>
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<th>Case Example 4: Re-exam?</th>
</tr>
</thead>
</table>
| ![TREDs Logo] | **Re-exam** | ![TREDs Logo] | - Driver is stopped on freeway for going 20 mph over speed limit  
- Driver explains he is in a hurry to get home to maintain his insulin schedule; however, there is no evidence to suggest a diabetic episode occurred |

| Rationale: | During the course of investigation, officer observed individual exhibiting behavior consistent with lack of cognitive function. |
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**Recommendation**

☑ Re-exam

- **Rationale:** Driver demonstrated poor planning and the DOL wants to know about drivers with insulin dependent diabetes for monitoring purposes.

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**Case Example 5: Re-exam?**

- Driver leaves local casino before dawn and does not turn on headlights
- Driver is followed on the I-90 for a couple of minutes by WSP with lights activated; driver fails to respond until ordered to stop via loud speaker
- Driver states she was unaware she was supposed to pull over for the lights
- Intoxication is ruled out and no other violations were observed

---

**Recommendation**

☑ Re-exam

- **Rationale:** Even though there were no other violations, this driver showed a lack of knowledge of the rules and regulations governing the safe operation of a motor vehicle.

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**Case Example 6: Re-exam?**

- Driver leaves local casino before dawn and does not turn on headlights
- Driver is followed on the I-90 for a couple of minutes by WSP with lights activated; driver fails to respond until ordered to stop via loud speaker
- Driver states she was unaware she was supposed to pull over for the lights
- Intoxication is ruled out and no other violations were observed

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**Reminders**

- Age is not a consideration
- Citation is not required
- Officers may recommend that an individual not drive; may not confiscate license
  - DOL is the only entity authorized to withdraw driving privilege
- Re-exams can be issued to out-of-state drivers
Reminders

- Avoid citing only violation codes, ordinance numbers, or statutes
- Referrals should not be based on a driver’s bad attitude alone
- Avoid using ‘confusion’ as a generic reason for referral
  - Everyone is ‘confused’ and rattled after a traffic collision
  - Drivers often state they “do not know what happened”

DOL Contact Information

Carla Weaver
Law and Justice Liaison
Email: cweaver@dol.wa.gov
Phone: 360-902-3669
Cell: 360-878-1262
Fax: 360-570-7827

Discussion

How do you avoid a negative reaction when issuing a re-exam to an older driver?

Communication

- Relay concern for the driver’s safety and the safety of other motorists
- A re-exam does not automatically mean a loss of driving privilege, the DOL has a system in place to evaluate skills and determine driving fitness

Alzheimer’s Association: TALK Tactics

- Take it slow: Approach the person slowly and speak slowly.
- Ask simple questions: Use questions with one word answer.
- Limit reality checks: Avoid correcting the person if they answer incorrectly; validate and re-direct.
- Keep eye contact: Eye contact and good non-verbal communication will help to put the person at ease.

Resources for Driver Education, Assessment & Referral

http://www.
Law Enforcement's Identification and Referral of Medically Impaired Older Drivers

NHTSA Video Toolkit

Medical Conditions in Older Drivers
NHTSA produced this series of short videos to show how different medical conditions common among older drivers can impact driving abilities. These videos show on-the-road examples to learn more about how to stay safe.

http://nhtsa.gov/Driving+Safety/Older+Drivers/Videos+Toolkit+On+Medical+Conditions

The Hartford

Driver Improvement

Washington State DOL supports Safe Driving for Seniors* with collision prevention courses

http://www.dol.wa.gov/driverslicense/seniors.html

Approved courses through
• 911 Driving School – Mature Drivers Course, Payallup, WA
• AAA Washington, Bellview, WA
• AARP – online classes
• I Drive Safely – online classes
• Washington Traffic Safety Education Association, Olympia, WA

Lifelong Driver

• Interactive computer course & workbook
• Driving simulations for hazard detection, visual search & oncoming gap analysis
• Takes 8 hours

AAA Roadwise Review

• Free, confidential online self screen; done in home
• Measures eight functional abilities related to crash risk
• Takes 30 – 45 minutes
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AAA Roadwise RX

Driver Rehabilitation Specialist (DRS)

- Performs comprehensive driver evaluations (clinical and on-the-road evaluations)
- Provides intervention to address and strengthen areas of impairment
- Prescribes vehicle modifications
- Determines the need for driving cessation
- Provides information and counseling for alternative transportation issues

DRS Resources

National – locate a specialist by zip code:
- Association of Driver Rehabilitation Specialists (ADED): (800) 290-2344 or www.aded.net

Washington:
- Multicare Good Samaritan Hospital, Payullup, WA 253-697-2506 or Email: erin.flagstad@goodsamhealth.org
- Assistive Technology Solutions, Issaquah, WA 425-373-1313 or www.atsolutions.biz
- St. Luke's Rehabilitation Institute, Mead, WA 509-473-6465 or Email: stower@st-lukes.org
- University of Washington – Medical Center, Seattle, WA 206-598-4833 or Email: jsh@uw.washington.edu
- Comprehensive Home and Companion Services, Seattle, WA 206-854-0309 or www.chcservices.com

Summary

- Older drivers overrepresented in intersection collisions (left turns, right of way)
- Often exhibit erratic driving behaviors resembling DUI, attracting Law Enforcement attention
- Difficult to distinguish cognitive impairment during traffic stop w/o targeted assessment
- Law Enforcement traditionally lenient with older driver violators
- Re-exam reporting more effective when supported by objective data

Alzheimer’s Association

24/7 Helpline: 800-272-3900

TREDS: Training, Research and Education for Driving Safety

Jill Rybar, MPH
Deputy Director
jrybar@ucsd.edu
858-534-9313
treds.ucsd.edu